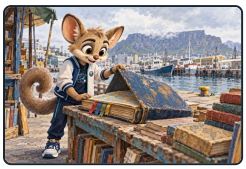
Add a friendly number

1. Add a friendly number



Name _____ Class _____ Date _____

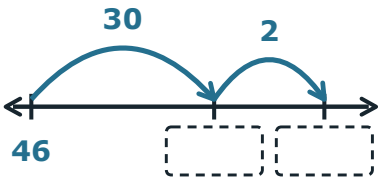
Max's stop · Cape Town · harbour bookstall. At a weathered blue bookstall on the Cape Town harbour, Max lifts the cover of a big old atlas with four coloured ribbons between its pages.

> **Today:** Add the **friendly part** of a number first (its tens, its hundreds or its whole), then add the rest.

Warm-up The friendly part first

Each answer helps with the next one. Fill in the model, then write the equation.

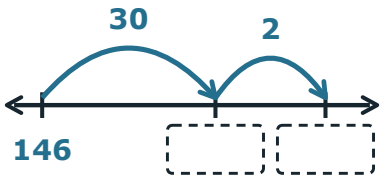
1 **a)** 46 + 32



46 + 30 = _____

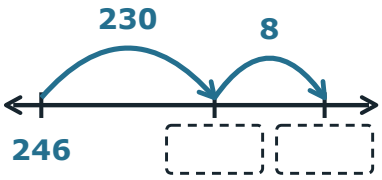
46 + 32 = _____

b) 146 + 32



146 + 32 = _____

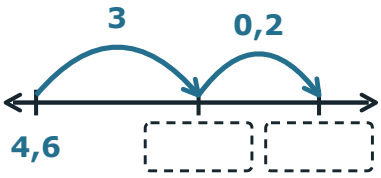
c) 246 + 238



246 + 230 = _____

246 + 238 = _____

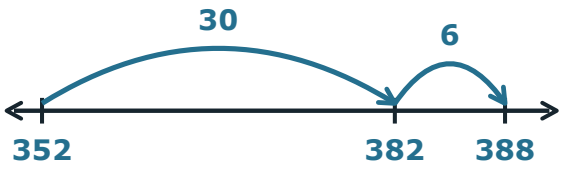
d) 4,6 + 3,2



4,6 + 3,2 = _____

KNOWLEDGE Whole numbers, decimals and rand

WORKED EXAMPLE **352 + 36**

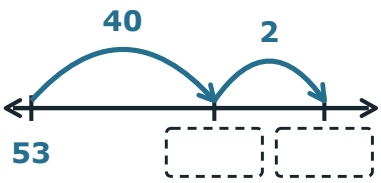


1. 36 is 30 and 6. Keep 352 whole and jump the friendly **30** first: 352 + 30 = **382**.
2. Now the 6 that is left: 382 + 6 = **388**.

352 + 36 = 352 + 30 + 6 = 388

2 ★ Fill in the model, then write the equation.

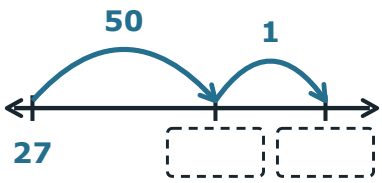
a) 53 + 42



53 + 40 = _____

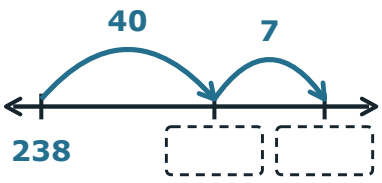
53 + 42 = _____

b) 27 + 51



27 + 51 = _____

c) 238 + 47

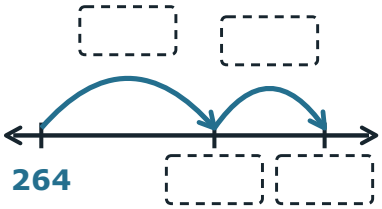


238 + 47 = _____

Add a friendly number

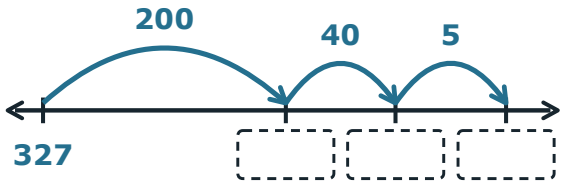
3 ★ Break up 35: jump its **friendly part** first, then the rest.
264 + 35

264 + 35 = 264 + _____ + _____ = _____



4 ★ Fill in or finish the model, then write the equation.

a) 327 + 245



327 + 245 = _____

b) 2 503 + 1 425



2 503 + 1 425 = _____

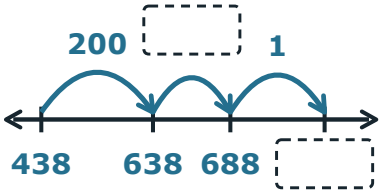
c) 6 874 + 1 520



6 874 + 1 520 = _____

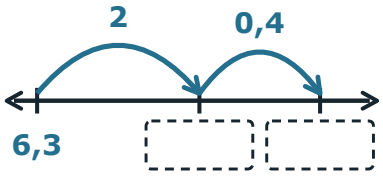
5 ★ Max drew the jumps for **438 + 251**, but one jump has no size yet. **How big is it, and where does the last jump land?**

438 + 251 = 438 + 200 + _____ + 1 = _____



6 ★ Finish the model, or draw your own. Then write the equation.

a) 6,3 + 2,4



6,3 + 2 = _____

6,3 + 2,4 = 6,3 + 2 + 0,4 = _____

b) 7,8 + 4,5



7,8 + 4,5 = _____

6 *Question 6 continued: finish the model, or draw your own. Then write the equation.*

c) 13,04 + 2,73 **d)** 40,8 + 0,36 **e)** R24,50 + R13,20



13,04 + 2,73 = _____



40,8 + 0,36 = _____



R24,50 + R13,20 = R_____

f) R36,75 + R42,10 **g)** R58,40 + R21,35



R36,75 + R42,10 = R_____



R58,40 + R21,35 = R_____

APPLICATION **At the bookstall** Draw your own model, then write your number sentence.

7 ★★ The unfinished **atlas** costs **R185**. Max also picks a second-hand bird book out of a crate for **R43**. **How much do the two cost together?**

Draw your model

_____ = R_____

8 ★★ The atlas has **248 pages** with maps on them and **136 pages** that are still blank. **How many pages does it have altogether?**

Draw your model

_____ = _____ pages

9 ★★ Max walked **2,5 km** from the station to the bookstall. With the atlas under his arm he walks **1,3 km** further along the quay. **How far has he walked altogether?**

_____ = _____ km

Draw your model

Add a friendly number

10 ★★

a) From the crates Max buys a book of sea stories for **R57,40** and a map of the Peninsula for **R32,50**. **How much does he spend?**

Draw your model

_____ = R_____

b) He pays Fatima, the bookseller, with a **R100** note. **How much change does he receive?**

Draw your model

_____ = R_____

11 ★★

After paying Fatima **R13,70** for a bookmark and a postcard, Max has **R28,60** left. **How much did he have before he paid?**

_____ = R_____

Draw your model

REASONING **Which jumps make the same sum?** Decide, then explain how you know.

12 ★★★

a) Which calculations are **equivalent to 64 + 35**? There is more than one.

64 + 30 + 5	**60 + 30 + 4 + 5**	**64 + 3 + 5**	**35 + 60 + 4**

Circle every card that fits.

b) 64 + 35

Draw your model

64 + 35 = _____

Explain: _____

13 ★★★

a) Max works out **34 + 25** with a jump of 20 and a jump of 5. Then he works out **3,4 + 2,5**. **What is the same? What is different?**

- ○ The digits are the same; the jumps are now 2 and 0,5
- ○ Nothing changes: the jumps are still 20 and 5
- ○ Everything changes: the two sums have nothing in common

Explain: _____

b) 3,4 + 2,5

Draw your model

3,4 + 2,5 = _____

Add a friendly number

14 ★★★

a) Max wrote **5,3 + 2,4 = 5,3 + 2 + 4 = 11,3**. **What went wrong?**

- ◯ The 4 in 2,4 is 4 tenths: the second jump must be 0,4
- ◯ He should have jumped 20 first
- ◯ Nothing went wrong: 11,3 is correct

b) 5,3 + 2,4

Draw your model

5,3 + 2,4 = _____

Explain: _____

15 ★★★

a) 207 + 643 = 840. Is the statement true or false?

◯ True ◯ False

b) 207 + 643

Draw your model

207 + 643 = _____

Explain: _____

16 ★★★

a) "Jumping the tens first and then the ones lands on the same number as jumping the ones first and then the tens." **Always, sometimes or never true?**

◯ always ◯ sometimes ◯ never

Explain: _____

b) The ones first this time: **57 + 32**

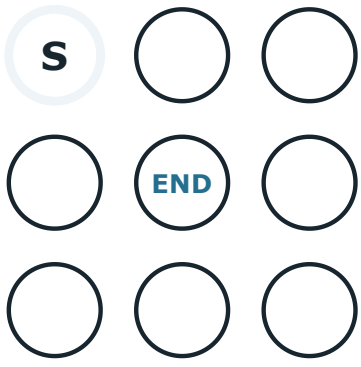
Draw your model

57 + 32 = _____

17 PROBLEM OF THE DAY **The lantern trail**

At a harbour bookstall in Cape Town, Max finds nine lanterns hung in a 3 by 3 square. He wants to light every lantern in one walk, and the middle one last. He steps only to a lantern right next to him (never diagonally) and never visits a lantern twice.

Start at S and finish on the lantern marked END. Number the lanterns in the order Max lights them.



Think further: Now there is no END. From which lanterns can Max NOT start a walk that lights all nine? Why?

Explain one thing you learned.

I can do this: ◯ independently ◯ with help ◯ I need more practice